

**FINAL 2007 AQMP**  
**APPENDIX IV-C**

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**Regional Transportation Strategy and  
Control Measures**

**June 2007**

These are all significant cost considerations that need to be fully analyzed in detail; additionally, studies need to be initiated to gauge costs associated with the reconfiguration of terminals that would accommodate proposed alternative technology systems. Overall, a comprehensive evaluation of the costs and benefits of alternative freight technology options is needed to help guide decision-makers as they evaluate strategies to optimize the region's goods movement transportation system.

### **Next Steps**

In addition to pursuing business plans to implement the HSRT and truck-only lanes previously discussed, studies are currently underway or will begin in the near future to further assess the potential of alternative freight technologies and determine the extent to which such technologies offer advantages over conventional truck and rail transportation in terms of shipping time and reliability, congestion and environmental mitigation, and cost.

The first is the SCAG Inland Port Feasibility Study, which will not analyze specific technologies but will instead examine the additional options for inland port locations, configurations, or functions that an alternative freight technology system may create. This study is currently in progress and is expected to be completed by June 2007.

The second is the Ports of Los Angeles and Long Beach Advanced Cargo Transportation Technology Evaluation and Comparison (ACTTEC) study, which is currently in the Request for Proposals (RFP) process. This study will evaluate the use of advanced technologies for moving containers from the Ports relative to conventional truck drayage with the goal of supporting sustainable operations while improving the quality of life in the communities around the Ports and along the major goods movement corridors.

The third is a SCAG study on the Feasibility of Innovative Freight Technologies, which will build on the work conducted in the ACTTEC study and examine the potential of alternative technologies to transport marine containers, as well as other non-port related goods, to locations in the SCAG region. Finally, it is anticipated that a study of container movements via alternative freight technologies will be conducted as part of the I-710 Environmental Impact Report (EIR)/Environmental Impact Study (EIS).

## **TRANSPORTATION CONTROL MEASURES**

### **Background**

TCMs are defined as strategies that adjust trip patterns or otherwise modify vehicle use in ways that reduce air pollutant emissions, and which are specifically identified and committed to in the most recently approved AQMP/SIP. TCMs are included in the AQMP as part of the overall control strategy to demonstrate the region's ability to come into attainment with the NAAQS.

Historically, the majority of emission reductions from mobile sources have come from technological improvements in vehicle engines and fuel, which are stipulated by U.S. EPA and

CARB. By law, and according to the Transportation Conformity Rule, vehicle technology-based, fuel chemistry-based and fleet maintenance-based measures cannot be considered as TCMs for timely implementation purposes.

A definition of TCMs is provided in EPA's Transportation Conformity Rule - 40 CFR Parts 51 and 93:

Transportation control measure (TCM) is any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in §108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this subpart.

The Rule also defines the criteria and procedures for timely implementation of TCMs as follows:

§93.113 Criteria and procedures: Timely Implementation of TCMs

(c) For TIPs, this criterion is satisfied if the following conditions are met:

- (1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area.
- (2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvement projects, e.g. the Congestion Mitigation and Air Quality Improvement Program.
- (3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.

CAA Section 108(f)(1)(A)<sup>6</sup> lists the following sixteen measures as illustrative of TCMs.

- i. Programs for improved use of public transit;
- ii. Restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- iii. Employer-based transportation management plans, including incentives;
- iv. Trip-reduction ordinances;
- v. Traffic flow improvement programs that achieve emission reductions;
- vi. Fringe and transportation corridor parking facilities, serving multiple occupancy vehicle programs or transit service;
- vii. Programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration, particularly during periods of peak use;
- viii. Programs for the provision of all forms of high-occupancy, shared-ride services, such as the pooled use of vans;
- ix. Programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- x. Programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- xi. Programs to control extended idling of vehicles;
- xii. Programs to reduce motor vehicle emissions, consistent with Title II of the Clean Air Act, which are caused by extreme cold start conditions;
- xiii. Employer-sponsored programs to permit flexible work schedules;
- xiv. Programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- xv. Programs for new construction and major reconstruction of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation, when economically feasible and in the public interest; and
- xvi. Programs to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.

In addition to the measures listed above, other measures may be considered as TCMs if they reduce emissions or concentrations of air pollutants from transportation sources by modifying vehicle use, changing traffic flow, or mitigating traffic congestion conditions. TCMs may be voluntary programs, incentive-based programs, regulatory programs, as well as market- or pricing-based programs.

Based on suggestions received from interagency consultation and discussions with transportation and air quality stakeholders via the Transportation Conformity Working Group (TCWG), SCAG formally refines the types of projects to be included as TCMs as appropriate during the AQMP/SIP and/or RTIP and RTIP Guidelines development process. During the regular update cycle for each of the listed documents, SCAG, in coordination with the TCWG, will refine and

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<sup>6</sup> See: <http://www.epa.gov/oar/caa/contents.html>

revise TCM descriptions and definitions in order to clarify the general TCM process as well as resolve specific implementation issues. It is SCAG's aim to work with County Transportation Commissions (CTCs), air quality stakeholders, and any other interested parties, primarily through the TCWG, to facilitate the TCM process and implement TCMs appropriately.

It is SCAG's responsibility to ensure that TCM strategies are funded in a manner consistent with the implementation schedule established in the RTIP at the time a project is identified as a committed TCM. The transportation conformity process is designed to ensure timely implementation of TCM strategies. If the implementation of a TCM strategy is delayed, or if a TCM strategy is only partially implemented, the emission reduction shortfall must be made up by either substituting a new TCM strategy or by enhancing other control measures through the substitution process described in this Appendix.

## **2007 AQMP TCMs**

The TCMs included in this Appendix are derived from the TCM projects listed in the first two years of the 2006 RTIP. The RTIP is the short-range vehicle used to implement the goals and objectives of the long-range RTP. The 2006 RTIP includes projects committed as TCMs in previous RTIPs but not yet completed as well as new TCMs. A list of the TCM projects can be found in Attachment A of this Appendix.

The enforceable commitment for the TCMs is to fund and implement projects and programs contained in the first two years of the current six-year RTIP. The remaining four years of the RTIP represent expectations in project scope and design only. The TCM projects in the RTIP are based on the projects planned in the RTP, which has a time horizon of 20 years. A full, illustrative list of these RTP projects can be found in Technical Appendix I of the 2004 RTP and Attachment B of this Appendix. Although the specific mix of projects to be funded with future RTIP dollars may ultimately change, the emission reductions anticipated, in aggregate, from these projects, set a key benchmark in determining the transportation sector's contribution to a mobile source emission budget and its associated conformity determination.

## **Rollover and Substitution of TCM Projects**

Each time the biennial RTIP is updated by action of SCAG's Regional Council, the entire list of TCM projects in the AQMP/SIP will be updated, and the new and continuing projects identified in the fiscally constrained first two years of the new RTIP will be rolled over into the AQMP/SIP. In the event that a specific TCM project is found to be non-implementable within the designated time frame, an appropriate TCM will be used as a substitute. In either case, the parties in the conformity rule interagency consultation process, established in the SCAG region as the TCWG, shall assess the suitability and implementability for the new TCM projects. Where a transportation control measure identified in the SIP is no longer implementable, SCAG may initiate the process described below in the section "Substitution of Individual TCM Projects" to identify and adopt a new control measures.

### **Rollover of TCM Projects (RTIP Update)**

# 2007 AQMP TCM Projects (from 2006 RTIP)

High Occupancy Toll (HOT) Lanes and Pricing Alternatives			
Lead Agency	Project ID	Description	2006 RTIP Completion Date
TCA	10254	SJHC, 15 MI TOLL RD BETWEEN I-5 IN SAN JUAN CAPISTRANO & RTE 73 IN IRVINE, EXISTING 3 M/F EA, DIR, 1 ADD'L M/F EA, DIR, PLUS CLIMBING & AUX LNS AS REQ. BY 2015 PER SCAG/TCA MOU 4/5/01. [2008 COMPLETION DATE FOR PHASE 1 ONLY]	2008
TCA	ORA050	ETC (RTE 241/261/133) TOLL RD (RTE 91 TO I-5/JAMBOREE) EXISTING 2 M/F EA, DIR, 2 ADD'L M/F IN EA, DIR, PLUS CLIMB AND AUX LNS AS REQ. BY 2015 PER SCAG/TCA MOU 4/05/01. [2010 COMPLETION DATE FOR PHASE 1 ONLY]	2010
TCA	ORA051	(FTC-N) TOLL RD (OSO PKWY TO ETC) (13MI) EXISTING 2 MF IN EA, DIR, 3 MF EA, DIR BY 2010; 4 MF EA, DIR BY 2015, PLS CLIMBING & AUX LANS PER SCAG/TCA MOU 4/05/01. [2010 COMPLETION DATE FOR PHASE 1 ONLY]	2010
TCA	ORA052	(FTC-S) TOLL RD (I-5 TO OSO PKWY) (15MI) 2 MF EA, DIR BY 2010, AND 1 ADDITIONAL M/F EA, DIR, PLS CLIMBING & AUX LANES AS REQ BY 2015 PER SCAG/TCA MOU 4/05/01. [2010 COMPLETION DATE FOR PHASE 1 ONLY]	2010